George Washington, Architect and Builder

by Waldon Fawcett

The Mansion at Mt. Vernon

Front View of Audley

Claymount Designed by George Washington

Detail of one of Washington's Designs

One of the Interiors in Accordance with Washington's Design of Claymount

AYH

AMERICAN people have never ceased to admire the versatility of George Washington. As a warrior and as a statesman, alike, he won fame in the superlative degree; and yet it is realized that he showed the same exceptional measure of ability in the more modest pursuits of a planter and a country squire. However, there is one branch of the great man's activities that has been largely overlooked by students of the many-sided Washington. This concerns his very considerable undertakings as an architect and builder—operations of such scope that they might almost have sufficed for a career for any ordinary citizen.

It is not sought, of course, to convey the impression that the nation's first president was professionally an "architect and builder," as we interpret the term today. He at no period of his life devoted his entire time to this profession, nor did he depend upon it as a means of livelihood. Indeed, George Washington was clearly an amateur rather that a professional, since none of his planning and building, so far as is known, was done for a monetary consideration. On the one hand he employed his architectural talent in his own private enterprises or in those of his relatives and friends. On the other hand his judgment in building matters was given for the benefit of his country and in neither case did he expect or receive pay.

The student of history may get many inklings of the role George Washington played as consulting architect to the newly established government in the early days of the republic. Washington's early experience as a surveyor—an occupation he followed during much of his young manhood—gave him splendid judgment as to the relative qualifications of sites for either public or private buildings. When the first Congress, confronted by the conflicting claims of a dozen different communities was sorely puzzled to decide upon a location for the national seat of government, George Washington was appealed to and it was largely because of his expressed preferences that the present site was chosen for the capital city which now bears his name.

Tradition has it that George Washington, seated on the veranda of an elevated country house, with the panorama of the present District of Columbia spread out before him, chose what is now known as Capitol Hill as the site of the legislative headquarters of the government. He played an even more active part in locating the Presidential mansion, for not only did he choose the site of the White House, but he personally conducted the negotiations for the purchase of the needed land, and Washington's patience was never more sorely tried than by the tactics of David Burns, a canny Scot, who owned the land selected for the President's House, and who placed a very high value on his holdings. The work of actually designing the various public buildings and laying out the streets and parks of the new Federal City was left by Washington in other hands; but up to the time of his last illness he exercised a general supervision of all creative work, and his architectural ideas were embodied in most of the plans drawn.

Notable as was General Washington's work in connection with the rearing of our most conspicuous public buildings, it is, perhaps, scarcely as interesting, as portraying the tastes of the first citizen of America as an individual, as was the part he played in the planning and construction of various private residences, located principally in Virginia and in what is now West Virginia. For all such operations Washington seemingly had a predilection, the natural outgrowth probably of his training as a surveyor, to which reference has been made above. There was the further circumstance, however, that every country gentleman of the Colonial period, living, as did Washington, in the comparative isolation of a big plantation, had needs have some knack for architectural ingenuity and the supervision of building construction.

Even with the manor house provided, supplementary buildings of brick, stone or frame construction had to be added from time to time, and as a plantation headquarters became a small community in itself there was the necessity for almost perpetual repairs and alterations.

Thus, whereas the mansion at Mount Vernon was not the original conception of George Washington, having been built by his half brother, Lawrence, some dozen years before it came into the possession of George Washington through inheritance, the latter gave the impress of his individuality to the stately structure and all its surroundings by means of numerous alterations and improvements, both within and without the "great house" and its subordinate structures. Similarly, the mansion at the nearby estate of Arlington, although not erected until after Washington's death, plainly evidences many of his distinctive ideas as to architectural arrangement. The presence of the Washington influence in the case of this building is readily explainable, since it was erected by Washington Parke Custis, adopted son of George Washington, who had lived for years at Mount Vernon and had, naturally, adopted many of the ideas of the Father of His Country.

The Colonial homes, for the design and construction of which George Washington was most largely responsible, are located in the picturesque Shenandoah Valley. The whole territory of which Charles Town, W. Va., is the center is of especial interest, for George Washington made the original surveys of all of this land for Lord Fairfax, and here, on a commanding site facing the Blue Ridge Mountains, he built Harewood mansion for his eldest brother, Samuel. George Washington spent three years in the beautiful valley, that was later to become famous as the scene of Sheridan's ride. All the while he was extending his surveys, and gradually he became the largest landed proprietor in this part of the Old Dominion. Then he induced his brothers, Samuel, John and Charles, to likewise invest in the land, which was then obtainable at very low prices.

George Washington's methodical thoroughness was well evidenced by the leisurely care with which he proceeded with the erection of Harewood, the construction extending over a period of three years, from 1856 to 1858, inclusive. For all that this mansion was so carefully planned and well built, it is not today in as good a state of preservation as most of the other houses for the erection of which George Washington was responsible. However, the decadence of this one-time summer home of President Washington has been due to neglect rather than to any inherent defect in construction, and a movement is now on foot to restore the building, which, by the way, was the scene of the wedding of James and Dolly Madison.

Two miles from Harewood is Claymount which, thanks to its excellent state of preservation, is now accounted George Washington's architectural masterpiece. George Washington drew the plans for this mansion, but did not supervise its construction, which was carried on by a relative. The manor house consists of a central building of brick with two commodious wings, and on each side a separate two-story building connected with the long rectangular building by a brick-walled courtyard 30 feet square. The connected buildings, which are all constructed almost wholly of yellow brick, have an aggregate length of 250 feet. On the north front of this expansive structure only a stone entrance portico relieves the rather severe outlines, but a 90-foot veranda, two-stories in height, stands out conspicuously on the south front.

George Washington's partiality for a spacious hall as a desirable architectural detail is indicated by the dimensions of this apartment at Claymount. It is parallel with the front of the house and 40 feet in length by 20 feet in width. The oak wainscoting of the walls is a feature, the carved panels extending to the ceiling, which is finished in the same wood. Opening from the hall, opposite the main entrance, are the drawing-room and library, while an arch under a graceful staircase serves as the entrance to a passage that leads to the dining-room and the tearoom or breakfast-room adjoining. Visitors to the house are, as a rule, most deeply impressed by the study which adjoins the library. This apartment occupies the full width of the building, and consequently has windows on three sides. At either end is a large, open fireplace. In many of the rooms there may be observed ideal examples of that white woodwork which is one of the most attractive features of the ideal colonial house.

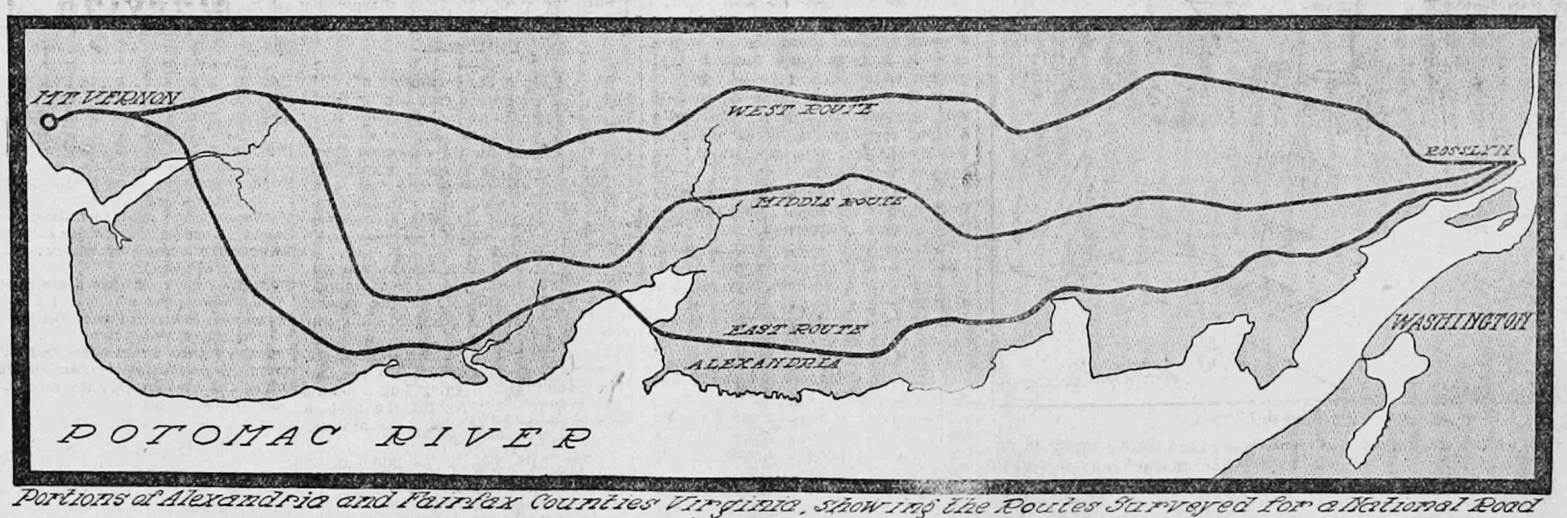
Distant about twelve miles from Claymount is Audley, another one of the historic homes of the Washingtons and one which has always been of more than ordinary interests to architects and others because of its novel floor plan. The house at Audley is not imposing in exterior appearance, nor is it of the most familiar Colonial type, being but one story in height. The floor plan above referred to conforms to the outlines of the letter H. An immense drawing room and an almost equally spacious dining room occupy the entire front of the house, corresponding to one of the parallel lines of the capital H. A long broad hall, corresponding to the cross bar of the H connects these rooms with the other section of the house which is devoted to sleeping apartments.

No mention of the residences for which George Washington has stood sponsor would be in any sense complete without reference to Woodlawn, a charming Colonial mansion located in Culpeper County, Virginia, about five miles from Mount Vernon. This manor house, which is today in the most excellent state of preservation, is generally accounted, next to Mount Vernon, the most significant of all the Washington homes because of the fact that it represents a labor of love on the part of the distinguished architect-builder. Gen. Washington built Woodlawn as a wedding gift for his favorite, Nelly Custis, his adopted daughter, upon whom centered the most demonstrative affection of Washington's later life. The main building at Woodlawn is of pure Colonial design and is forty by sixty feet in size. There is a veranda at the main entrance, a spacious hall and all the other well-known features of this style habitation including the wings, connected by corridors with the main structure, these wings being little more than one story in height while the central portion has a height of two stories. The whole structure is of brick.

George Washington gets credit for "Octagon House," which is located a few squares from the White House at Washington and is today one of the show places of the capital city. The nation's first Chief Magistrate laid off the ground in this vicinity and prepared the original plans for the mansion although it was left to another architect to carry out these plans. Octagon House, which was temporarily used as the Presidential Mansion after the British soldiers burned the White House in 1814, derives its name from its octagonal form. Buildings of unusual outline seem to have been something of a fad with Architect George Washington. He built a sixteen-sided barn at Mount Vernon and the mill which he constructed on that estate was likewise many sided.

AN APPIAN WAY TO MT. VERNON

C. C. Carlin



Portions of Alexandria and Fairfax Counties Virginia, Showing the Routes Surveyed for a National Road From Washington, D. C. to Mt. Vernon, Va.

Senator F. S. Martin

WITH the approval of President Roosevelt and the hearty co-operation of the patriotic societies of the country, the proposed National Highway from Washington to Mt. Vernon will soon be an accomplished fact, unless something unforeseen happens. This broad way from Washington to Mt. Vernon is planned as a memorial to George Washington and bids fair to rival the most famous road of history—the Appian Way of Rome.

Of all cities in the country Washington has a larger number of tourists each year than any other. Every stranger who visits the National capital is anxious to visit the tomb of the Father of His Country, and see with his own eyes the historic relics in the home of the first President of the United States, which occupies a commanding position on the Potomac River fifteen miles below Washington.

There are two ways of reaching Mt. Vernon. One is by means of an electric railroad that offers but scant view of the many beauties of the surrounding country and the other is by boat which affords a view only of the broad Potomac and the wooded shores on either side. A broad Highway between the two places of National interest has long been a cherished dream of the patriotic.

For many years patriotic societies have been bringing the matter before Congress for action, but until 1890 no action was taken. At that time Congress appropriated ten thousand dollars for the purpose of having surveys made of a number of proposed routes. As a result, Gen. Peter C. Hains, who was at that time Engineer Officer in charge of Public Buildings and Grounds, placed a competent force in the field and three surveys with intersecting lines were made. These surveys were reported to Congress by the President and no further action was taken until the present session of Congress when the Virginia Legislature unearthed an old claim against the United States for money lent by the State to the First Congress at the instance of George Washington for the purpose of building the Capitol. This sum amounted to $120,000. Investigation of United States records in the Treasury Department showed that the claim was a just one.

The Virginia Legislature passed a bill some months ago deeding to an association which had been incorporated as the Mt. Vernon Avenue Association its right and title to this money and asking Congress to turn the money over to the Association for the purpose of building a grand National Highway from Washington to Mt. Vernon.

Representative C. C. Carlin, of Virginia, who has been connected with the Mt. Vernon Association since the incipiency twenty years ago, introduced the following bill in Congress during the present session:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled:

That out of any money in the Treasury not otherwise appropriated the Secretary of the Treasury is hereby authorized and directed to pay to the Treasurer of the Mt. Vernon Avenue Association, chartered by the laws of Virginia, said Mt. Vernon Avenue Association being the assignee of the State of Virginia, the sum of $120,000, with interest at six per cent. per annum, from the dates of the respective advances made by the state of Virginia until paid, being the sum loaned by the State of Virginia, to the United States, through President George Washington, and used for the purpose of constructing public buildings of Washington, District of Columbia, for the use of the Federal Government, which said appropriation shall be in full satisfaction and payment of the amount heretofore claimed by the State of Virginia on said account.

That the money hereby appropriated and directed to be paid to the said assignee of the State of Virginia shall be expended in laying out, opening, constructing and for the improvement of a public avenue and highway from Washington, District of Columbia, to the tomb of Washington at Mount Vernon, as described in the charter of the Mount Vernon Avenue Association.

That said association may construct its avenue through the Arlington estate by such routes and under such supervision as shall be approved of by the Secretary of War.

That the cost of constructing said avenue through the Arlington estate, to an amount not exceeding $50,000, shall be paid out of the Treasury, out of any money not appropriated and in addition to the sum heretofore appropriated upon the certificate of the Secretary of War.

That this act shall be in force from its passage.

When Representative Carlin's bill was introduced to the House it was referred to the Committee of Claims. The last week in January Representative Carlin requested that consideration of the report of the Committee of Claims on the bill be made the order of business for February 22 (Washington's Birthday).

Speaker Cannon said that he did not see any reason why the bill should not receive consideration on that day, and made the order. Concurrent with the presentation of the bill in the House, Senator Martin, of Virginia, introduced a similar bill in the Senate, which was passed unanimously by that body.

Representative Carlin comes from the old Alexandria district, and while still a young man has made himself felt in Congress. He said recently in reference to the bill:

"I consider the obtaining of a highway from Washington to Mount Vernon as my life work. Furthermore, I would be pleased to retire into private life were I the man who could bring this boon to the American people, for from my youth I have been a member of the Mount Vernon Avenue Association, and I have always realized the connecting link that this roadway would prove between the home of our first and greatest president and the city that bears his name. One thing of which we Virginians can never be accused of is a lack of patriotism. I am a patriot first and a Virginian afterward. This I consider a rather good combination. In my boyhood I traveled many times to Mount Vernon, saw the relics of George Washington there, and I might say sat at the footstool of the father of my country and imbibed my democracy and my patriotism in those impressive surroundings. The Mount Vernon Association was organized in the office of my employers when I was a law student. I was an interested spectator of the first meeting. The association has been working quietly and unostentatiously to attain results and has been successful in doing much preliminary work. The survey made under the direction of General Hains was as complete, and is today, as could be made. The work was very exhaustive and shows three different routes.

"The most plausible plan, in my opinion, after years of study, is the west route, running from the Aqueduct Bridge, through Arlington and by the Episcopal Theological Seminary to Mount Vernon.

"When the bill is brought up before the House for consideration from the Committee on Claims, I know the House will take prompt action, for the President and several leading Republicans of the House not only indorse it, but promise me their hearty support. The day following the President's famous ride to Warrenton, Va., I had occasion to call on him at the White House and jocularly remarked that the roads were pretty stiff. The President replied that he thought the roads will be much better when my bill is passed."

Senator Martin, whose bill passed through the Senate, as the little boy said, "like a streak of lightning," is an enthusiast for the proposed Appian Way. He said:

"When I introduced the bill in the Senate, I had a good business proposition and that body saw it. The State of Virginia, which I as a Senator represent in the upper body, and whose affairs I am bound to look after, had a just bill against the United States for the sum of $120,000, and I proceeded to collect it. I think it is a splendid proposition for the United States to have had the use of that money for so long and to now have it put to such a practical and patriotic use. The State of Virginia only receives the money back through the Mount Vernon Avenue Association for the purpose of making a grand boulevard from the Nation's capital to the home of Washington."

Owners of property along the proposed routes have signified their intention of donating the right of way wherever it will be necessary to diverge from the county roads. The county commissioners of both Alexandria and Fairfax counties, through which the proposed highway is to pass, are all favorable to the proposition.

According to the survey referred to by Mr. Carlin, which was made by General Hains, three routes were proposed. The east route running almost directly along the bank of the Potomac, possesses many engineering problems that would entail an enormous expense. On this route the historic old city of Alexandria would be passed; but experts in these problems contend that it would not be desirable to have the Appian Way pass through any city, as questions of jurisdiction would always be coming up between the city and the United States authorities. The item of maintenance and the proper division of expense for policing is also a problem that United States authorities would not wish to take hold in conjunction with municipal authorities.

The middle route has very few advantages and is undesirable from a patriotic standpoint, because it would cut off the better part of the Arlington, the famous graveyard of military dead and the home once owned by Gen. Robert E. Lee.

The route which Representative Carlin considers the best presents few engineering problems, only one bridge being necessary anywhere, and of small construction at that. This route runs through Arlington and passes some of the most famous homes in that section of the Old Dominion state.

Colonel Bromwell, superintendent of public buildings and grounds in the District of Columbia and chief military aid to the president, is an engineer officer of the Army who has made good. Although at the present time his life is cast in pleasant places, he has experienced all the hardest work that comes to an officer in his branch of the service. He would like to build this proposed Appian Way. Recently he said, when discussing the matter:

"I consider the proposed National Highway to Mount Vernon an admirable and a patriotic undertaking and I am heartily in favor of the project. It will prove a good thing for the city of Washington, for the State of Virginia and for the whole United States, as well as proving a valuable addition to the beautiful park system of the District of Columbia. Of course it is a question for Congress to decide whether the state of the Treasury warrants such an expenditure of money at this time for this purpose. It would be, however, an excellent thing to make immediate arrangements for building the highway, so that when the funds are available there will be no delay in carrying the work to a speedy completion.

"I consider it a straight government proposition, for while Washington was a son of Virginia, he was the first commander of the armies of the United States, the first president of the United States and will always remain the first citizen of this republic. It would be only fair that the state of Virginia should donate the right of way. The building and maintenance of the highway should be in the hands of the Federal government, with concurrent police jurisdiction along its route.

"My suggestion would be that the right of way for the road should be 60 feet wide. This would admit of a roadway 20 feet wide and allow plenty of room for drainage and parking. I have not personally examined any of the routes proposed, but I have studied very carefully the survey made under General Hains, and I am satisfied such a road as I suggest could be constructed for $300,000. Of course, I do not mean to say that the road would be everything that could be desired in the way of landscape gardening and other matters. But once a good highway is completed the government will take care of the rest.

"My estimate on the cost of construction is based on the accomplishment of the New York state road builders, and by the way they are building roads, whose reports show that it costs about $1,000 a mile for each foot of width to construct a macadam roadway. This means for a 20-foot roadway an expenditure of $20,000 a mile. As I said, I have not been over the roads and am not familiar with the engineering problems that would have to be solved; but I understand that the grade on the west route is good and that only one bridge is necessary.

"Many of the former plans for the building of the Mt. Vernon roadway have been too monumental, and Congress has been afraid to take any action on account of the large sums requested. I am satisfied, however, that the road would have been built many years ago if the money asked was available. A 20-foot roadway is sufficient for all the present needs of the people. Carriages, automobiles and wagons, with such a roadway, could pass each other without the slightest inconvenience."

Many plans have been suggested for the beautifying of the proposed right of way—the most practical being the suggestion of the Mt. Vernon Avenue Association. By its adoption each state and territory in the Union would have a hand in maintaining the parkway on either side. The plan is to give to each state the right to build and maintain along the highway a building which will act as a permanent exhibit of the commercial, mineral and agricultural possibilities of the state so represented.

The strange thing to all visitors to Mount Vernon has been the impossibility of going there without the use of a public conveyance. Many of the couples going there and who wish to travel on the "two's company—three's a crowd plan" by taxicab or carriage are among the class that go to Washington once in a lifetime and that time is after the ringing of their wedding bells. A conductor on one of the Washington-Mount Vernon cars said recently when approached on the subject:

"Do I carry many brides and grooms? Well, I guess yes. We get them all—either coming or going. You see if they go from Washington to Mount Vernon on the boat they come back on the car in order to see what they, poor souls, call the 'scenery' of the country. Of course, the company never figured on the scenery proposition when it was building this road. We hug the Potomac pretty nigh all the way from Alexandria to the gate at Mount Vernon, and after some years of work along this line I must admit that I don't care much for such scenery. But I can spy the newly-married as soon as they come into the car for, besides the husband's store clothes and unbroken patent leather shoes he wears a self-conscious look. And then she tries to steal her little hand into his when she thinks nobody is looking but I am next all right. But then the poor things are strangers a long way from home."

"A long way from home, did you say?"

"Yes, sirree, the majority of the couples that come here are from way off. Ordinary people in the West are better off than we are back here and they travel farther. Indiana, Illinois, Missouri, Iowa and Nebraska people come here generally after they get married. But the one visit satisfies them. They spend a week or ten days in Washington and never come back."

A good argument, indeed, for the cupids in Congress who would make the way of happy lovers easier and more wonderful.

NAVIGATING AIRSHIPS - PROBLEMS FOR AERIAL SAILORS.

With the advent of the practical aeroplane and the present rush to construct not one or a dozen, but hundreds of aeroplanes after the models of the Wright brothers, a scientific study of the air itself, its currents, its peculiarities as regards aeroplane sailing and other practical questions are being noted carefully. The results of these studies by the master navigators of the air will eventually be beyond a question of a doubt be used as books of instruction for the men who will be employed to sail aeroplanes just as professional chauffeurs now handle the automobile.

The principal problem presented to the aerial sailor, or pilot, comes from the established fact that the atmosphere is broken up into ascending and descending columns of air. These are brought about whenever there is a difference in the temperature of the air on the surface of the earth and in the clouds above the globe. These ascending and descending currents of air are what make handling the aeroplane difficult.

Many lessons in air navigation have been learned by the experts from the behavior of big birds when they pass through these varying columns of ascending and descending air currents. For instance, an eagle has been observed to enter a current of air that was ascending rapidly and go straight forward, yet the eagle, while keeping the same distance from the earth, was actually falling in the air current about five miles an hour.

The bird was really falling slowly through a column of ascending air and manipulated its wings so as to fall the proper amount and yet continue forward towards its destination with little loss of speed or distance. In other words, birds that fly great distances invariably seek the ascending air currents and then are forced merely to maintain their balance while slowly dropping through the ascending air. In this way they really balance themselves slowly on the column of air and the uprushing of the air current does the vast majority of the work needed to maintain the birds aloft. When once out of the ascending air current the birds are forced to work their wings at exhausting speed to keep aloft, and even then are brought very close to the ground if the descending current is widespread and very strong.

The study of these air currents and the methods of making use of them will doubtless in years to come be reduced to a practical science, and expert air pilots will be able to make great speed by seeking the proper air currents. Of course, delicate instruments will have to be carried for the air pilots to see just what the atmosphere is doing, ascending or descending, and the rate of progression forward and both upward and downward of the various atmospheric currents.